AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 16

2. AMENDMENT/MODIFICAITON NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicble)*
003	07/16/2010	NM-10-01640	

6. ISSUED BY	CODE	7. ADMINISTERED BY *(If other than Item 6)*	CODE
Federal Aviation Administration Acquisition Management Group, ANM-52 1601 Lind Ave SW Renton, WA 98057			

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*	(X)	9A. AMENDMENT OF SOLICIATION NO.
	☒	DTFANM-10-R-00045
		9B. DATED *(SEE ITEM 11)* 06/15/2010
	☐	10A. MODIFICATION OF CONTRACT/ORDER NO.
		10B. DATED *(SEE ITEM 13)*

CODE	FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a)By completing items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPIRATION DATA *(If required)*

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
☐	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
☐	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.*) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
☐	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
☐	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (*Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

See page 2 through 13 for answers to questions received.

See page 14 and 16 for referenced attachments.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*	
15B. CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA *(Signature of Contracting Officer)*	16C. DATE SIGNED

I. The above referenced solicitation is amended as follows:

- Receipt of Offers: The date for receipt of offers remains **July 29, 2010**.

- The following changes are made to the Solicitation, Specifications and Drawings:

  - ***Elevator Specification section 14 21 00 pg 11, para. 3.6.B.8c: Change Center to Side.***
  - ***Tower Shaft form liner clarification:***
    Bolded areas in attached sketch are typical form liner locations.

- Answers to questions received from offerors:

1. Question: Who is responsible for hiring the Special Inspections? Plan Sheet S008 "ATCT Quality Assurance Program Notes" under section "Special Inspections", paragraphs 1 and 2 indicate the Owner will employ special inspectors. Sheet S002 "Structural General Notes" under section "Quality Assurance Plan" references to Sheet S008. Likewise the Specifications Sections associated with Special Inspections (Concrete, Metals and Earthwork) also indicate that the FAA will retain a special inspection agency. How does the FAA hire the Special Inspection Agency? Has the FAA already selected the Special Inspection Agency?

Answer: The FAA will be responsible for acquiring the Special Inspection services, and has already initiated that effort.

2. Question: Is the Contractor responsible to hire a testing agency to perform Quality Control testing for items or work other than special inspections"? Section 01 44 00 "Contractor's Quality Control" indicates the Contractor is responsible for testing but does not clearing define the scope of the QC testing. It appears that the Specification Sections associated with non-special inspection items such as concrete and asphalt paving require the Contractor to hire (engage) an independent testing agency.

Answer: The construction contractor is responsible for all testing required by the contract documents. The Owner is responsible for special inspection testing required per the IBC, all other applicable codes or what is identified in the contract documents. There will be no additional charge to the owner for testing that is considered standard testing practices for construction and included in the contract documents.
ALL references in the specifications for "special inspections required by Clark County Development Services shall be replaced with "special inspections required by the 2006 IBC".

3. Question: AED Cabinets are noted on several architectural drawings, however there does not appear to be a specification for them. Please provide specification.

Answer: Refer to Spec section 10 28 00; pg 2, Part 2.1.A.3

4. Question: Paragraph 1.2.C.11 of specification section 087100 refers to a Division 08 Section "Automatic Door Operators". Please provide the referenced specification.

Answer: Delete from Spec section 08 71 00; pg 1, Part 1.2.C.3,5,6,7,9,10,11,12,14,15.
Add the following at section 2.11.E:
1. *AUTOMATIC DOOR OPERATORS – HEAVY DUTY*

a. *All door closers shall be ANSI 156.19, Grade 1 Certified. Units shall have adjustments for door closing force and backcheck, motor assist from 0 to 30 seconds, motor start up delay, vestibule interface delay, electric lock delay, and door hold open delay up to 30 seconds. Operator units shall provide conventional door closer opening and closing forces unless the power operator motor is activated by an initiating device with door closer assembly having adjustable spring size, backcheck valve, sweep valve, latch valve, speed control valve, and pressure adjustment valve to control door closing. Operators shall have push and go function to activate power operator or power assist functions. Units shall have a presence detector input to prevent a closed door from opening or a door that is fully opened from closing and shall have a hold open toggle input to allow remote activation for indefinite hold open; door shall close the second time the input is activated. Operators shall have a SPDT relay for interfacing with latching or locking devices. All controlling operator switches shall be of radio-frequency design and not hard-wired.*

1) *Specified Manufacturer: Besam Power Swing*
2) *Approved Substitutes: Norton 6900 Series, Sargent MPower 4000 Series*

5. Question: Refer to detail F6/A505. Please provide specifications for the Trolley Lift.

Answer: The Trolley Lift is not part of this contract.

6. Question: Refer to detail F4/P502, Elevator Sump Detail. The detail indicates "discharge piping see plans", however this piping and pump are not shown on either P101 and E121. The sump is also not indicated on A409. Is the sump pump required? If so please indicate the piping and power requirements.

Answer: Pumps and piping are shown and scheduled. See P-101, P-105 and P-601. Both elevator pits require sump pumps. Sheet P101 shows sump pump at elevator 1. Refer to C7/ P105 shows sump pump at elevator 2. Sheet E121 shows power requirements for sump pump at elevator 1. Refer to B8/E125 for power requirements for elevator 2.

7. Question: Refer to sheet M604, Fan Power Box Schedule. This schedule indicates an FPB-5 box and says to see plans for location(s). We have been unable to locate this box on the drawings. Please verify whether or not this symbol is used?

Answer: Not all FPB's in schedule may be used. Please bid items found.

8. Question: The Specifications Metal Fabrications 055000, Metals Stairs 055100 and Pipe & Tube Railing 055213 indicate throughout to use galvanized finishes for steel in exterior installations. In the drawings A407 general note A and A505 general note C indicate that all exposed steel is to be powder coated. Drawing A323 detail C note 12 and A503 general note B indicate steel is to be painted in exposed locations interior and exterior. Please clarify design intent.

Answer: All exterior exposed metal shall be shop galvanized and primed. The finish coat to be field painted, unless noted otherwise. All interior exposed metal to be shop primed and field painted. All welds to be ground smooth in shop prior to galvanizing and priming. Any field assembly which removes shop galvanizing is to be repaired in field as required.

9. Question: Drawing S104 Note 4 indicates a True Castellated Beam with hexagonal openings. However the Building section E7/A303 shows a cellular composite beam with round openings. Please clarify the design intent.

Answer: The openings in the Castellated beams are hexagonal per structural. ALL structural items should comply with structural drawings.

10. Question: The top of steel at detail B3/S127 is at 346'-11". Detail C3/A113 indicates a slope of the roof to be 3/8" per 12". Sloping this roof poses significant issues in regards to the bolted moment connections – Please see C5/S530, E8/S531, C5/S531, C7/S531. Tilting this frame to suit the 3/8" slope would entail compound bevel cuts on all tube columns and rail posts and significantly increase costs. Would it be better to slope the roof using tapered insulation?

Answer: The roof structure was designed to slope and that design intent will remain. (Reference is S125 not S127). Sloping is per Architectural.

11. Question: On drawing S532 the deck edge is shown cantilevered and supporting an exterior stud wall. Please review the floor plans level 17 and up as there are a few locations around the deck edge where the deck is close to 90 degrees of the Beam. There is also duct work indicated in this space. However where HSS 6x3x1/4" is indicated, there is only 5-7/8" available space between the tube steel and WF beams.

Answer: Please clarify what is meant with by" the deck is close to 90 degrees of the beam". Distance from deck edge to column/beam centerline is 15.875". Subtracting the HSS and half of the beam flange leaves 7.375" for a 6" duct opening. (15.875" -6" -2.5" = 7.375")

12. Question: On Drawing S532 Details A8/S532 the deck edge is shown cantilevered and supporting the exterior stud walls. At this deck edge there is no bent plate deck edge indicated. Should there be a bent plate deck edge with support provided in these areas? Please confirm that detail F6/S534 is for interior openings only and not exterior deck edges.

Answer: F6/S534 applies to both interior openings and exterior deck edges.

13. Question: On detail E3/S534 it indicates a 4.5" minimum gap on the deck. The majority of the beams on the ATCT have a top flange width of 4" – W12x14, W14x22. Please advise which beams this detail applies to and indicate on the plans.

Answer: Use 4" min. as specified on sections below indicated on same detail.

14. Question: Does this project involve Bechtel?

Answer: No Bechtel involvement.

15. Question: What are the values to the Liquidated Damages that are mentioned throughout the documents and FAA Clauses?

Answer: In general, there are no liquidated damages on this project. However, there is specific language about liquidated damages in regards to the subcontracting plan. Please see Part II – Section I, clause 3.6.1-6 titled, "Liquidated Damages – Subcontracting Plan (January 2010)."

16. Question: Paragraph 3.3.D of specification section 310000 and General Note A.17 on drawing C001 require that Contractor comply with recommendations given in "Results of Geotechnical Exploration Air Traffic Control Tower and Terminal Radar Approach Control Building McCarran International Airport Clark County, Nevada" by Kleinfelder dated July 8, 2009. A copy of this document does not appear to have been issued with other bid documents; please provide at your earliest opportunity.

Answer: Refer to Appendix I; Geotechnical Report, located at the end of Volume V.

17. Question: On the exterior of the building the design indicates a "form liner" to give a sandblasted texture look creating a barber pole effect up the tower. This Barber pole effect will not work on the Eleven (11) levels of the four sided "H" shaped structure. For this effect to work correctly it needs to be square, circular, or semi-circular (like hexadecagon). Will this effect be revised or removed from this proposal?

Answer: The form liner is NOT a sandblasted texture look NOR is it intended to be a "barber pole" effect. Please take another look at the elevations and specifications that indicate exterior finishes. The design was based on: Fitzgerald formliners is pattern number 16938; the Wooden Plank type formliners.

18. Question: On sheet 12 35 40-8 of the written specifications titled SYSTEMS FURNITURE, there is a written description of room 317. I have noticed the floor plan contains additional layouts for rooms 207 and 308. Are there additional specifications for those rooms? Are there any other areas that receive this furniture specification?

Answer: Attach system furniture descriptions for rooms 109, 207 and 308. Add the sheets 9,10 found at the end of this amendment, to the end of specification section 12 35 40 .

19. Question: Will there be utility temporary construction services available when the project starts? Temporary Power needs will be critical as well as fire water services.

Answer: Contractor will need to coordinate temporary utilities with the utility providers and CCDOA or LVVWD for water sources.

20. Question: General Note N.3.B on sheet S007 - ATCT General Structural Notes indicates two different depths for 4' diameter drilled shafts. However, detail F5/S511 calls for a 90' shaft length only. Please clarify where 50' shaft lengths are used on this project.

Answer: Follow F5/S511. All piles depths are 90'. General Note N.3 was used as a guideline in design.

21. Question: Refer to specification 033000 – CAST-IN-PLACE-CONCRETE. Section 3.1.C.1 indicates concrete surface irregularities are to be limited to a Class A, 1/8 inch finish. However, section 3.10 appears to indicate this may only apply to surfaces exposed to public view. Please confirm that a Class A finish is only required on surfaces exposed to public view or clarify design intent.

Answer: A Class A surface is required for surfaces exposed to view. For surfaces not exposed to view, a Class B surface, ¼ inch finish is required.

22. Question: Spec 10 14 00 states that there will be Wall Mounted, Polymer ADA and UFAS Compliant Signs, Dimensional Characters and Logo, Metal Etched, Sign Plaques at exterior locations and Cast Aluminum Seal, however there are no drawings or schedules that indicate where these signs should go. Please clarify.

Answer: Signs are a part of this project. A signage schedule and sign details will be forthcoming with next amendment.

23. Question: Drawing A607 Materials Finish Legend, designation "WP" calls for a 12' x 12' sculpted wall panel by Koroseal. The manufacturer has explained that these panels are available in a standard size of 4' x 8 and that these patterns are not conducive to being cut in half and stacked. Also there is a border trim piece that surrounds the finished panels that won't fit if the 4'x8' panels are cut down. What is the desired effect or look that is to be obtained with these panels? Please provide an elevation if possible to show the intent.

Answer: Koroseal can design and detail a custom panel to this size so that the pattern is integral and continuous. The design intent is a 12'x12' continuous textured panel. No changes needed.

24. Question: Refer to sheet M112 – C3 / LVL 21 – There is a rectangle shaped box shown on the inside radius of stair 6. This box appears to be a part of the mechanical scope due to it is shown/drawn dark but is not labeled. Please indicate what this box is used for.

Answer: See P111, RC-1

25. Question: The "Material Finish Legend" on sheet A607 denotes a "WC" Walltalkers: Nu-Vu-Rite but it is not listed in the finish schedule for any wall surfaces. Is this material to be used somewhere? If so please clarify locations.

Answer: No "WC – Walltalkers: Nu-Vu-Rite" is used on this project. Please delete Walltalkers from the Materials Finish Legend..

26. Question: Finish type "SC", sealed concrete, is called for on a few walls on the Room Finish Schedule. Should these walls be painted in lieu of the sealed concrete, or is the intent that this be a spray applied paint application. This occurs at the ATCT stairways and the TRACON restrooms.

Answer: The walls in question are poured colored concrete exposed walls. A clear sealer is what is intended on these concrete walls.

27. Question: Specification section 051200, paragraph1.4.A. calls for an AISC certified erector. There are few AISC certified erectors regularly serving the greater Las Vegas area and we ask that this requirement be relaxed.

Answer: See response to Question No. 33 in Amendment No. 002.

28. Question: Refer to Specification section 13 49 25 – 2.1A.1 and Drawing A5.03/C5. This section specifies both an inner window (Raydel M26) and an outer window (Raydel M42). Detail C5 on drawing A5.03 only show one (1) window. Please clarify if one window is correct. Also, if one window is correct, which material is to be used M26 or M42?

Answer: The detail shown is correct the specification should be changed to only one layer of Raydel M26.

29. Question: Reference drawing P601 Plumbing Fixture Schedule & Plumbing Drain Schedule. Symbols P-9, P-14, FD-1, HB-1 & TMV-1 do not appear to be used anywhere within the drawings. Should we account for some quantity of each, or do these symbols not apply to this project?

Answer: TMV-1 please see E/G room and level 8 and 9. All others please bid items found.

30. Question: Is all low voltage wiring within buildings to be installed in conduit, such as, but not limited to HVAC control wiring, central vacuum inlet receptacles to the twist timers and vacuum motor and the Fuel Tank monitoring and alarm system(s) wiring?

Answer: Yes, all low voltage wiring needs to be in conduit.

31. Question: Reference Sht. M504 / E2 detail note #5, which indicates an inertia fan base if scheduled. The schedule does not indicate an inertia base, however a pad is not shown for this fan. Is one required?

Answer: Yes

32. Question: Combination Fire Smoke Dampers are indicated on the drawings, but there is not a specification for those dampers. There is a specification for a Fire Damper and a Smoke Damper separately. Please provide specification for combination FSDs.

Answer: Add to specification 23 33 00

2.16 COMBINATION FIRE AND SMOKE DAMPERS

- *A. Known Acceptable Source: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:*
  - *1. Air Balance Inc.; a division of Mestek, Inc.*
  - *2. Cesco Products; a division of Mestek, Inc.*
  - *3. Greenheck Fan Corporation.*
  - *4. Nailor Industries Inc.*
  - *5. Ruskin Company.*
- *B. Type: Static and dynamic; rated and labeled according to UL 555 and UL 555S by an NRTL.*
- *C. Closing rating in ducts up to 4-inch wg static pressure class and minimum 4000-fpm velocity.*
- *D. Fire Rating: 1-1/2 and 3 hours.*
- *E. Frame: Curtain type with blades outside airstream except when located behind grille where blades may be inside airstream; fabricated with roll-formed, 0.034-inch- thick galvanized steel; with mitered and interlocking corners.*
- *F. Heat-Responsive Device: Replaceable, 165 deg F rated, fusible links.*
- *G. Heat-Responsive Device: Electric resettable link and switch package, factory installed, rated.*
- *H. Smoke Detector: Integral, factory wired for single-point connection.*

I. Blades: Roll-formed, horizontal, interlocking, 0.034-inch- thick, galvanized sheet steel. In place of interlocking blades, use full-length, 0.034-inch- thick, galvanized-steel blade connectors.

J. Leakage: Class I.

K. Rated pressure and velocity to exceed design airflow conditions.

L. Mounting Sleeve: Factory-installed, 0.052-inch- thick, galvanized sheet steel; length to suit wall or floor application with factory-furnished silicone calking.

M. Master control panel for use in dynamic smoke-management systems.

N. Damper Motors: Modulating or two-position action.

O. Comply with NEMA designation, temperature rating, service factor, enclosure type, and efficiency requirements for motors specified in Section 23 05 13 "Common Motor Requirements for HVAC Equipment."

1. Motor Sizes: Minimum size as indicated. If not indicated, large enough so driven load will not require motor to operate in service factor range above 1.0.

2. Controllers, Electrical Devices, and Wiring: Comply with requirements for electrical devices and connections specified in Division 26 Sections.

3. Permanent-Split-Capacitor or Shaded-Pole Motors: With oil-immersed and sealed gear trains.

4. Spring-Return Motors: Equip with an integral spiral-spring mechanism where indicated. Enclose entire spring mechanism in a removable housing designed for service or adjustments. Size for running torque rating of 150 in. x lbf and breakaway torque rating of 150 in. x lbf.

5. Outdoor Motors and Motors in Outdoor-Air Intakes: Equip with O-ring gaskets designed to make motors weatherproof. Equip motors with internal heaters to permit normal operation at minus 40 deg F.

6. Nonspring-Return Motors: For dampers larger than 25 sq. ft., size motor for running torque rating of 150 in. x lbf and breakaway torque rating of 300 in. x lbf.

7. Electrical Connection: 115 V, single phase, 60 Hz.

P. Accessories:

1. Auxiliary switches for signaling or position indication.

33. Question: Refer to Foundations note 11 on Non-ATCT Structural General Notes drawing S001, which reads “Cast slabs on grade on Vapor Barrier. Vapor Barrier over 4” aggregate base course for all heated or occupied spaces.” This note is somewhat confusing. Are all slabs on grade, including the parking garage slab on grade to be cast over vapor barrier, or just interior spaces? Please clarify design intent.

Answer: Vapor Barrier is required for the slabs on grade in the Base Building and Guard Station. A vapor barrier is not required in the Parking Garage; however, the parking garage slab shall be placed on a 4” aggregate base course.

34. Question: Sheet T101 has conduit size indicators where there appears to not be any conduit. Please clarify conduit sizes on this sheet.

Answer: The Note in room 122 ,“1 Twisted Shielded Pair No 16 AWG wire in 1/2” Conduit (Typical)” applies to the circuit for the speakers. Conduit associated with the “_” Conduit” indictors was removed from the drawing – disregard these 5 indicators.

35. Question: T Sheets show communications devices and equipment, however there is a specification for these. Please provide specifications or clarify design intent.

Answer: Specification for Public Address System, Section 27 51 16 added.
Provide UL listed R-45 jacks in quad configuration at each location indicated (per legend on E001). Also, provide a conduit path from each Telephone/Data Quad Outlet to a data cable tray, typically ½" with pullstring. For the 1st floor of the Base Building, provide a conduit path from the Telephone/Data Quad Outlets to Telco Room 209.

36. Question: Reference "Solicitation, Offer and Award" document - page #3 - (Part 1- Section B) B001. Prices/Costs - Contract Line Items – Is there a specific scope of work associated with each CLIN? As an example, does line 011 - SEWAGE LINES (5020A) include all the sewage lines for the whole project with line items 001 through 004 being void of sewage line pricing, or is line 011 intended to include site sewage line pricing outside building footprints? Similar definitions would be useful for CLIN 005 through 020.

Answer: No specific scope. It is up to each offeror's discretion.

37. Question: Refer to Specification section 12 24 12. There are conflicts in the specifications. 2.2B calls for spring rollers but 2.2I specifies weighted hem bar with weight to bring the shade down. This would only work for motorized rollers. 2.2A calls for a bottom bar 1-inch x ½ inch which is our standard for spring powered Tower Shades but 2.2I calls for an aluminum extrusion which we use again for motorized shades. Pleas clarify design intent.

Answer: ATCT cab shades are not in this contract. Shades for the Guard Shack will be addressed in amendment 4.

38. Question: Refer to Drawing C106. Key Note 2 states construction parking will be in the Terminal 3 parking garage. Will the Terminal 3 parking garage be complete at the time construction of the ATCT & TRACON project begins? Will there be a fee for construction workers to park in the Terminal 3 parking garage? Will the concrete batch plant be removed from the ATCT & TRACON site before construction begins?

Answer: As stated in General Note D. and H, the contractor will need to coordinate construction laydown and parking with CCDOA at the time of construction. FAA makes no warranty that areas indicated are available for lease by the contractor. Contractor will need to conduct their own investigation. Terminal 3 parking garage will most likely not be ready by the time of construction and will not be available for construction parking. The concrete batch plant will be removed prior to the Notice to Proceed for this project.

39. Question: Refer to section A8/A304, wall sections starting on drawing S127 and to details A8 and B4/S511. Architectural drawings show an elevator pit depth of 6'-0 at the ATCT, whereas structurals show a top of mat elevation of -5'-0 and that the top of mat is constant across the entire mat. Clarify design intent.

Answer: All pit depths to be 5'-0"

40. Question: Some specification sections, such as 055213, 064023, 071800, 078123, 081416, 084113, 084413 and 092116.23, call for LEED submittals. Is this project to be LEED certified? If yes, what are Contractor's responsibilities, if any, beyond required submittals? If not, are LEED submittals required?

Answer: No LEED certification is sought on this project. The LEED performance requirements need to be maintained as required by the specification and indicated in the submittals.

41. Question: Is a temporary standpipe with a temporary pump required during construction once we exceed 30ft elevation?

Answer: Yes, a temporary standpipe and pump will be required.

42. Question: Section 21 13 13, 2.2 calls out for Galvanized pipe and black steel pipe, is the piping for the wet sprinkler and wet standpipe systems to be galvanized throughout including the fittings and couplings?

Answer: 2.2 only describes the materials. Section 3.16 indicates what to use. Per NFPA 13, dry-pipe and pre-action systems are limited to galvanized piping.

43. Question: Section 21 13 13, 3.16 C&D specify pipe to black steel – 4" and smaller to be Schedule 30 and threaded ends whereas 5" and larger to be Schedule 10 and roll-grooved ends. The Industry Standard is 1 ½" pipe and smaller to be Schedule 40 and Threaded ends (occasionally roll-grooved) and 2" and larger to be schedule 10 and roll-grooved ends. Is the industry standard acceptable?

Answer: Bid per the contract drawings and specifications.

44. Question: Please concur that either Roll-grooved ends or cut-grooved ends are acceptable for this project?

Answer: Bid per the contract drawings and specifications.

45. Question: Are sleeves required through Gyp board walls regardless if wall if fire rated or not? If yes does this apply to the sprinkler main feeds only and not to the branch lines which normally are smaller than 2"? Fire caulking will be applied around branch lines going through rated walls.

Answer: Yes, in accordance with 21 13 13, 3.10, A with the indicated exceptions.

46. Question: Parking Structure drawings show the hose valves spacing to exceed the maximum allowable using a 100ft of hose and 30ft water spray. Will we be required to add two more hose valves at center point on each level?

Answer: Bid per the contract drawings and specifications. This issue can be resolved during the shop drawing review.

47. Question: Per Fire Protection Drawings F001, ATCT Tower Standpipe specifies 125 PSIG at the most remote Hose Valve connection (Level 20), per NFPA 14 and to achieve the 100 PSIG required at the hose outlet on Level 22, the pressure required on Level 22 Hose Valve will be 139 PSIG. Is this acceptable?

Answer: The pressure is at the hose connection, not at the hose outlet. NFPA 14, 7.8.1: "…minimum residual pressure of 100 (6.9 bar) at the outlet of the hydraulically most remote 21⁄2

in. (65 mm) hose connection…" If further clarification is needed, please send information about the calculation of 139 PSIG.

48. Question: Based on preliminary calculations the travel distance from the hose valve on Level 20 to the top of the stair on Level 22 exceeds 100 ft which the normal length of a fire hose. Is this acceptable or will a Hose Valve be added on Level 21 to take care of this?

Answer: Bid per the contract drawings and specifications. This issue can be resolved during the shop drawing review.

49. Question: Does the Clark County Fire Department (CCFD) amendment on hose valves apply to this project? (See attached)

Answer: No. Further coordination between the FAA and CCFD is needed to make a final determination.

50. Question: Per NFPA 14 7.8.3.2 requires a pressure regulating hose valve to be installed once the inlet static exceeds 175 PSI (200 PSI per CCFD). Based on this a 3" Pressure Regulating Hose Valve test a drain piping will be required. Our recommendation is to install on 3" pipe drain say in stair #3 only. When the hose valves located in Stair #2 a hose can be used to connect the hose valve to the 3" drain in Stair #3. Is this acceptable?

Answer: Bid per the contract drawings and specifications. This issue can be resolved during shop drawing review.

51. Question: Does the Buy American Act apply to this project? Do all the material have to be domestic?

Answer: The Buy American Act does apply to this project. Please refer to applicable clauses such as: 3.6.4-3 Buy American Act - Construction Materials (July 1996), 3.6.4-4 Buy American Act - Construction Materials Under North American Free Trade Agreement (July 1996), and 3.6.4-5 Buy American - Steel and Manufactured Products (July 1996). You can view the full text of these clauses at: http://conwrite.faa.gov.

52. Question: In addition to submitting to the FAA, are we required to submit to the CCFD?

Answer: Fire marshal approval for the site work is currently underway. Any required Fire protection submittals will need to be submitted to Fire Marshall for review and required site and building inspections will also need to be coordinated with the Fire Marshall.

53. Question: Is there a FM200 or a double interaction system in this project? If yes, please identify the area or areas.

Answer: No.

54. Question: Regarding the subcontracting plan, is the FAA requiring that all short-listed prime contractors submit a subcontracting plan at this time? Also, based on the language provided in contract clause 3.6.1-4, is it the FAA's expectation that each prime contractor specify their own SBE goal?

Answer: Yes and yes.

55. Question: Are the liquidated damages specified in contract clause 3.6.1-6 the only LD's for the project?

Answer: Refer to #15 of this amendment.

56. Question: Footing F11 on Sheet S140 along lines D-8/9 is detailed to be 32' in length. The footing table indicates the Length of the footing is to be 30'0". Please clarify the correct size of the footing.

Answer: See response to Question No. 21 in Amendment No. 002.

57. Question: Footing Detail G1/S540 is shown on drawing S140 and is called out along the perimeter edge of the parking garage. Please clarify if this footing detail applies to the following locations, grid 17-C, 17-E, G-16/17, G-1/2.

Answer: Yes, the referenced section applies to the narrowest footings on Grid Line 1 abutting the end of shear wall footing "F10" and on Grid G from 1 to 2 and 16 to 17.

58. Question: On drawing S140 Tie beams are indicated to be installed along grid line G/5-7 and G/11-14 per detail E1/S540. Please provide a detail showing how the tie beam ties to the Turndown Thickened slab edge.

Answer: Tie beams are required on Grid line 17 from 3-4, 5-6, 11-12 and 13-14. The turndown slab edge bears on top of the tie beam but is not tied or otherwise connected to it.

59. Question: Drawing S140 indicates a detail G8/S540 to be used in the retaining wall ramp section. This detail cannot be found on drawing S540. Please provide the detail for bidding use.

Answer: See response to Question No. 20 in Amendment No. 002.

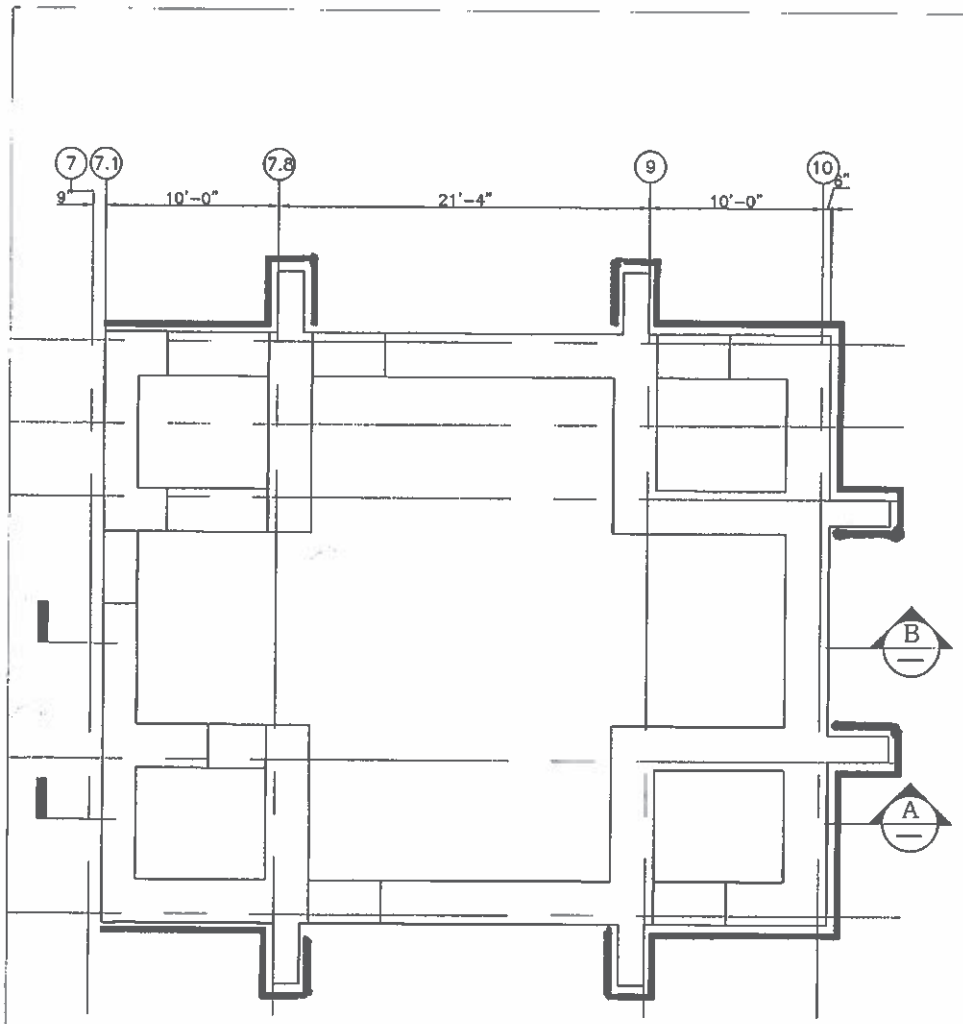
60. Question: Drawing S140 along Gridline F near line 1 there is a keyed note that is blank pointing at the wall. Please clarify what this keyed note should be.

Answer: The keyed note 3 applies to that location.

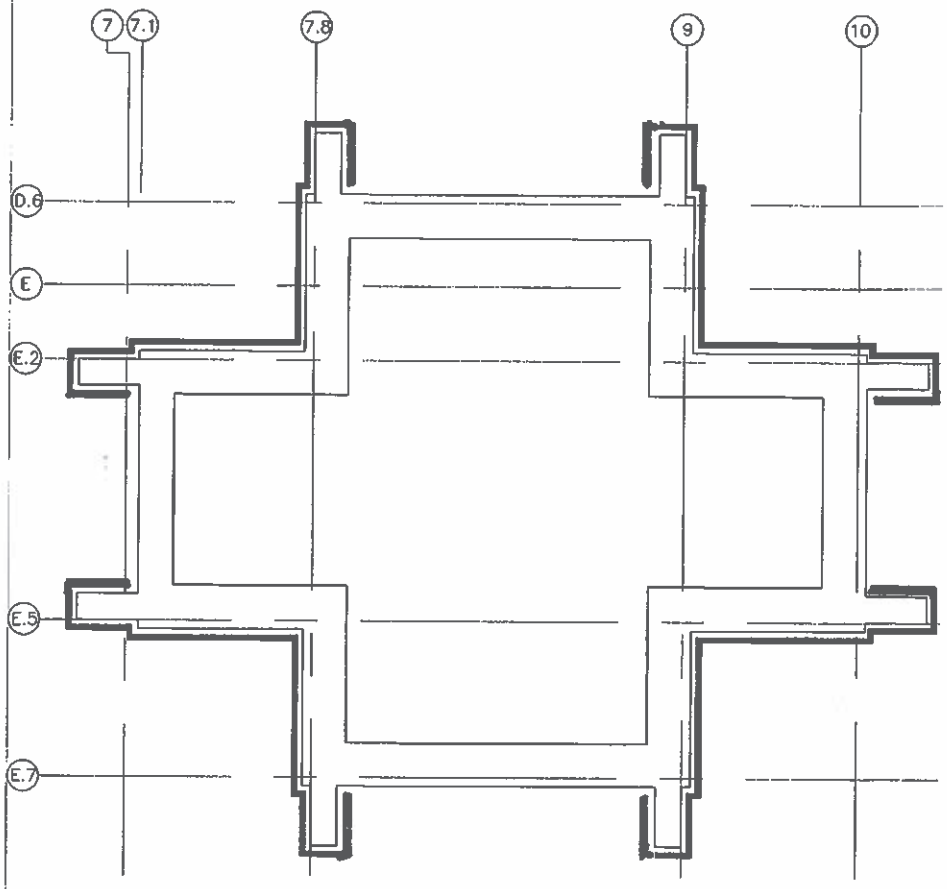
61. Question: According to the GeoTechnical report, the settlements of the foundations are specified clearly. Are there any sequence or time frame requirements specified by the structural engineer regarding the construction of the ATCT Tower in relation to the TRACON Low Rise or the Parking Garage? Specifically how far into construction of the Tower will we have to be before we can begin construction of the Low Rise foundations?

Answer: From a geotechnical standpoint, the only sequencing or timing consideration regarding the construction of the Air Traffic Control Tower (ATCT) and Terminal Radar Approach Control (TRACON) buildings is that the drilled shaft foundations and foundation cap (pile cap) of the ATCT shall be constructed prior to constructing the portion of the TRACON building that is cantilevered over the ATCT foundation. There are no geotechnical concerns in regard to the sequencing or timing of the construction of the Parking Garage.

<<<END OF AMENDMENT>>>



ATCT LEVEL 1



ATCT LEVEL 5

(C.C.F.D.)

The National Fire Protection Association Standard for the Installation of Standpipe and Hose Systems, NFPA 14-2003, is hereby adopted by reference with the following modifications:

NFPA 14-2003 is available from the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts 02269-9101

The National Fire Protection Association Standard for the Installation of Standpipe and Hose Systems, NFPA 14-2003, is hereby adopted by reference with the following modifications:

Chapter 3 System Requirements
3.3.9 High-rise Building, *is amended to read as follows:*
3.3.9 High-rise Building. A building more than 55 feet in height. Building height shall be measured from the lowest level of fire department vehicle access to the floor of the highest occupiable story.

Chapter 6 Installation Requirements

6.3.5.4 Fire Department Connections. Fire Department connections shall be located within 100' (30.5 m) of an approved fire apparatus access road.

Chapter 7 Water Supplies

7.2.1.1 and 7.2.1.2 *are amended to read as follows:*

7.2.1.1 Where the residual pressure at a 40-mm (1 ½-in.) outlet on a hose connection exceeds 150 psi (10.3 bar), an approved pressure-regulating device shall be provided to limit the residual pressure at the flow required by Section 7.10 to 150 psi (10.3 bar).

7.2.1.2 Where the static pressure at a hose connection exceeds 200 psi (13.9 bar), an approved pressure-regulating device shall be provided to limit static and residual pressures at the outlet of the hose connection to 150 psi (10.3 bar) for 40-mm (1 ½-in.) hose connections and 200 psi (13.9 bar) for other hose connections. The pressure on the inlet side of the pressure-regulating device shall not exceed the device's rated working pressure.

7.3.2.3 *is amended to read as follows:*

7.3.2.3 Class I systems shall be provided with 2 ½-in. (38.1-mm) hose connections so that all portions of each floor level of the building are within 130 ft (39.7 m) of a hose connection. Distances shall be measured along a path of travel originating at the hose connection.

7.8.1.1 *is amended to read as follows:*

7.8.1.1 Hydraulically designed standpipe systems shall be designed to provide the waterflow rate required by Section 7.10 at a minimum residual pressure of 125 psi (8.6 bar) at the outlet of the hydraulically most remote 65-mm (2 ½-in.) hose connection and 100 psi (6.9 bar) at the outlet of the hydraulically most remote 38-mm (1 ½-in.) hose station.

7.8.3.1. and 7.8.3.2 *are amended to read as follows:*

7.8.3.1 Where the residual pressure at a 40-mm (1 ½-in.) outlet on a hose connection available for trained personnel use exceeds 150 psi (10.3 bar), an approved pressure-regulating device shall be provided to limit the residual pressure at the flow required by Section 7.10 to 150 psi (10.3 bar).

7.8.3.2* Where the static pressure at a hose connection exceeds 200 psi (13.9 bar), an approved pressure-regulating device shall be provided to limit static and residual pressures at the outlet of the hose connection to 150 psi (10.3 bar) for 40-mm (1 ½-in.) hose connections available for trained personnel use and 200 psi (13.9 bar) for other hose connections.

9004.5 NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection.

7.8* Minimum and Maximum Pressure Limits.

7.8.1 Minimum Design Pressure for Hydraulically Designed Systems.

7.8.1.1 Hydraulically designed standpipe systems shall be designed to provide the waterflow rate required by Section 7.10 at a minimum residual pressure of 100 psi (6.9 bar) at the outlet of the hydraulically most remote 65-mm (2½-in.) hose connection and 4.5 bar (65 psi) at the outlet of the hydraulically most remote 38-mm (1½-in.) hose station.

7.8.2 Minimum Design Pressure for Pipe Schedule Designed Systems.

7.8.2.1 Pipe schedule designed standpipe systems shall have piping sized in accordance with the pipe schedule in Table 7.8.2.1 to provide the required waterflow rate at a minimum residual pressure of 6.9 bar (100 psi) at the topmost 65-mm (2½-in.) hose connection and 4.5 bar (65 psi) at the topmost 40-mm (1½-in.) hose station.

Table 7.8.2.1 Pipe Schedule — Standpipes and Supply Piping Minimum Nominal Pipe Sizes in Inches

Total Accumulated Flow		Total Distance of Piping from Farthest Outlet		
L/min	gpm	<15.2 m (<50 ft)	15.2–30.5 m (50–100 ft)	>30.5 m (>100 ft)
379	100	2	2½	3
382–1893	101–500	4	4	6
1896–2839	501–750	5	5	6
2843–4731	751–1250	6	6	6
4735	1251 and over	8	8	8

Note: For SI units, 3.785 L/min = 1 gpm; 0.3048 m = 1 ft.

7.8.2.2 Pipe schedule designs shall be limited to wet standpipes for buildings that are not high-rise buildings.

7.8.3* Maximum Pressure at Hose Connections.

7.8.3.1 Where the residual pressure at a 40-mm (1½-in.) outlet on a hose connection available for trained personnel use exceeds 6.9 bar (100 psi), an approved pressure-regulating device shall be provided to limit the residual pressure at the flow required by Section 7.10 to 6.9 bar (100 psi).

7.8.3.2* Where the static pressure at a hose connection exceeds 12.1 bar (175 psi), an approved pressure-regulating device shall be provided to limit static and residual pressures at the outlet of the hose connection to 6.9 bar (100 psi) for 40-mm (1½-in.) hose connections available for trained personnel use and 12.1 bar (175 psi) for other hose connections.

7.8.3.3 The pressure on the inlet side of the pressure-regulating device shall not exceed the device's rated working pressure.

7.9 Standpipe System Zones.

7.9.1 Each zone requiring pumps shall be provided with a separate pump.

7.9.1.1 This shall not preclude the use of pumps arranged in series.

7.9.2 Where pumps supplying two or more zones are located at the same level, each zone shall have separate and direct supply piping of a size not smaller than the standpipe that it serves.

7.9.2.1 Zones with two or more standpipes shall have at least two direct supply pipes of a size not smaller than the largest standpipe that they serve.

7.9.3 Where the supply for each zone is pumped from the next lower zone, and the standpipe or standpipes in the lower zone are used to supply the higher zone, such standpipes shall comply with the provisions for supply lines in 7.9.2.

7.9.3.1 At least two lines shall be provided between zones.

7.9.3.1.1 One of these lines shall be arranged so that the supply can be automatically delivered from the lower to the higher zone.

7.9.4 For systems with two or more zones in which portions of the second and higher zones cannot be supplied using the residual pressure required by Section 7.8 by means of fire department pumpers through a fire department connection, an auxiliary means of supply shall be provided.

7.9.4.1 This means shall be in the form of high-level water storage with additional pumping equipment or other means acceptable to the authority having jurisdiction.

7.10 Flow Rates.

7.10.1 Class I and Class III Systems.

7.10.1.1* Minimum Flow Rate.

7.10.1.1.1 For Class I and Class III systems, the minimum flow rate for the hydraulically most remote standpipe shall be 1893 L/min (500 gpm), and the calculation procedure shall be in accordance with 7.10.1.2.

7.10.1.1.2* Where a horizontal standpipe on a Class I and Class III system supplies three or more hose connections on any floor, the minimum flow rate for the hydraulically most demanding horizontal standpipe shall be 2840 L/min (750 gpm), and the calculation procedure shall be in accordance with 7.10.1.2.

7.10.1.1.3 The minimum flow rate for additional standpipes shall be 946 L/min (250 gpm) per standpipe, with the total not to exceed 4731 L/min (1250 gpm) or 3785 L/min (1000 gpm) for buildings sprinklered throughout.

7.10.1.1.4 Flow rates for combined systems shall be in accordance with 7.10.1.3.

7.10.1.1.4.1 When the floor area exceeds 7432 m^2 (80,000 ft^2), the second most remote standpipe shall be designed to accommodate 1893 L/min (500 gpm).

7.10.1.2* Hydraulic Calculation Procedure.

7.10.1.2.1 Hydraulic calculations and pipe sizes for each standpipe shall be based on providing 946 L/min (250 gpm) at the two hydraulically most remote hose connections on the standpipe and at the topmost outlet of each of the other standpipes at the minimum residual pressure required by Section 7.8.